The Afghanistan Engineering Support Program assembled this deliverable. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.



| Site Visit Report | | Project: WO-LT0082AMD2 Sardar Kabuli Girls' High School Fire Door Replacement QA Services |
|---|----------------|---|
| Location: | | Contract Number: |
| Dar-ul- aman Road, Qala-e- Raees, Kabul, Afghanistan | | AID-306-TO-15-00014 |
| Inspection Date: | | Coordinates: |
| March 27, 2016 | | Latitude: 34.484997 N° Longitude: 69.137351 E° |
| Inspectors: | Status: N/A | Weather: Sunny (19 °C) |

PRESENTED TO

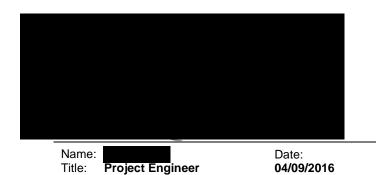
United States Agency for International Development (USAID)
Office of Economic Growth and Infrastructure (OEGI)

Kabul, Afghanistan

PRESENTED BY

Tetra Tech, Inc. Afghanistan Engineering Support Program Contract No. EDH-I-00-08-00027-00 Task Order No. 1

Kabul, Afghanistan



Tt Reviewed by:



Name: Date: Title: Civil/Structural Lead 04/09/2016

EXECUTIVE SUMMARY

The fire doors' replacement project of Sardar Kabuli Girls' High School (SKGHS) is located on Dar-ul- aman Road at Qala-e-Raees, approximately 2.5 km north of the Dar-ul- aman Palace in Kabul, Afghanistan.

Under a cooperative agreement with United Nations Office for Project Services (UNOPS), a USAID contractor has completed the construction of the SKGHS. At the final inspection, the installed 23 fire-rated doors were found to not be in accordance with National Fire Protection Association (NFPA-80) and the contract specifications, and thusly, these fire doors were not accepted as part of the SKGHS final construction, even though they were installed and are in full operation. The original building contractor was compensated for all accepted final inspected building construction, but not for these 23 fire door units.

Another USAID approved contractor (Perez) has been contracted to replace the existing installed 23 door units with approved NFPA-80 fire-rated door units.

Tetra Tech (Tt) has been assigned to perform Quality Assurance (QA) Services for the replacement of new doors provided for SKGHS and to be installed by Perez. Tt shall verify that the items are in compliance with the approved product submittals, with the original school building designs, per the International Building Code (IBC) and per the life safety code NFPA-80.

No Construction activities were observed during this site visit.

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1.0 INTRODUCTION

The Sardar Kabuli Girls' High School is located at Qala-e-Raees, Dar-ul-aman Road, District 7, Kabul, Afghanistan. This project includes provision and installation of 23 NFPA-80 fire rated doors with all minor and major elements having a fire rating of 90-180 minutes. Tetra Tech (Tt) Afghanistan Engineering Support Program (AESP) performs Quality Assurance (QA) Monitoring and Evaluation Services for the Sardar Kabuli Girls' High School Project.

This report documents existing site conditions on March 27, 2016.

2.0 SITE VISIT

Prior to this recorded site visit, two civil project engineers from Tt AESP reviewed the construction documents for the SKGHS fire door replacement. On March 27, 2016, these two engineers and one engineering intern visited the school to photographically record existing conditions specially targeting the areas to be affected by future construction activities.

These Tt staffers were accompanied by a Perez project manager during the site visit. The findings and observations of this site visit are documented in this report, and by photos provided in the figure section. During the site visit, Tt staffers discussed the construction activities and the construction schedule with the Perez project manager.

3.0 SITE VISIT DETAILS:

The observations recorded during the site visit are provided below:

- The overall condition of the installed door units was good. The reason for the fire door unit replacements is because the units do not meet design requirements. The door units must have capability of stopping smoke movement, and currently does not meet that smoke-stop requirement.
- 2. A second reason for the replacement of the units is that field adjustments were made to the fire-rated door units. Because of a procurement issue, the door units that were ordered and received were too large to fit in the existing openings. The contractor made cuts and re-welds of the frames in order to fit the doors into the opening, but the contractor did not realize that the field modifications of the door frames voided the manufacturer's fire rating of the certifications of the door units. Examples of these cuts/re-welds are numerous, and are documented in the photos provided in this report.
- 3. All door units had the complete hardware package containing the following elements:
 - a. Two closures
 - b. Two panic push bar devices
 - c. One pull keyed handle set
 - d. One vertical integrated door stop with sleeve in floor
 - e. Eight door hinges
 - f. One active door astragal
 - g. Two base-mounted door stops
- 4. It is assumed that the school administrator has the keys to all door units, and expects that these units are being salvage stored at USAID.
- 5. The existing door panels, door closures, handle sets, panic hardware and door stops are in good condition.
- 6. Door units did not have any broken or cracked glass panes.



- 7. Each door panel of the existing units is supported by four hinges, and the new units are designed with only three required hinges per door panel. Therefore, when the new three hinge doors are installed, there will be one empty hinge.
- 8. All door panels are hung and are swinging in the correct directions per the drawings.
- 9. The walls are painted with two-toned plaster finish.
- 10. The ceilings and ceiling offsets are painted with a single color plaster finish.
- 11. The floor-to-wall intersection is trimmed by a 20mm x 15cm marble base.
- 12. The floors are terrazzo finish.
- 13. There are no obvious interferences because of mechanical, fire alarm or electrical items.
- 14. Each door unit is identified within the photos by a printed temporary number sign of the door unit which matches the school as-built drawings.
- 15. The ceiling offset of door #15 is plaster cracked as an existing condition. No contractor corrective action required for this pre-existing condition.

FIGURES



Figure 1. View of Front side door #1,FK, 2016-03-27



Figure 2. View of door #1 hinges FK, 2016-03-27



Figure 3. View of Front side door #2 ,FK, 2016-03-27



Figure 4. Fire rating voided because of field modifications, i.e. cut & weld, FK, 2016-03-27



Figure 5. View of Front side door #3, FK, 2016-03-27



Figure 6. View of Backside door #3, FK, 2016-03-27



Figure 7. View of Front side door #4, FK, 2016-03-27



Figure 8. View of frame Fire-Rating Voided Because of Field Welding, FK, 2016-03-27



Figure 9. View of Front side door #5, FK, 2016-03-27



Figure 10. View of Typical installed panic push bar hardware with door stops, FK, 2016-03-27



Figure 11. View of front side door #6, FK, 2016-03-27



Figure 12: Swings checked against plans, FK, 2016-03-27



Figure 13. View of Front side door #7, FK, 2016-03-27



Figure 14. View of Typical top part of door #7, FK, 2016-03-27



Figure 15: View of Front side door #8, FK, 2016-03-27



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Figure 17. View of Front side door #9, FK, 2016-03-27



Figure 18. Door #9 opening direction, FK, 2016-03-27



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Figure 20. View of Front side door #10, FK, 2016-03-27



Figure 21. View of Front side door #11, FK, 2016-03-27



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Figure 48. View of Typical door closure, FK, 2016-03-27



Figure 49. View of Front side SKGHS of school, FK, 2016-03-27